



**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[EPA-R09-OAR-2013-0687; FRL9903-99-Region 9]**

**Approval and Promulgation of Implementation Plans;  
State of California; 2012 Los Angeles County State  
Implementation Plan for 2008 Lead Standard**

**AGENCY:** U.S. Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** EPA is proposing to approve a State implementation plan revision submitted by the State of California to provide for attainment of the 2008 lead national ambient air quality standard in the Los Angeles County nonattainment area. The submitted SIP revision is the *Final 2012 Lead State Implementation Plan - Los Angeles County*. Specifically, EPA is proposing to approve the emissions inventory, attainment demonstration, the reasonably available control measures/reasonably available control technology, reasonable further progress demonstration, and contingency measures as meeting the requirements of the Clean Air Act and EPA's implementing regulations for the lead NAAQS.

**DATES:** Any comments must arrive by [Insert date 30 days from the date of publication in the Federal Register].

**ADDRESSES:** Submit comments, identified by docket number EPA-R09-OAR-2013-0687, by one of the following methods:

- Federal eRulemaking Portal: [www.regulations.gov](http://www.regulations.gov). Follow the on-line instructions.
- E-mail: [tax.wienke@epa.gov](mailto:tax.wienke@epa.gov).
- Mail or deliver: Marty Robin, Office of Air Planning (AIR-2), U.S. Environmental Protection Agency Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Instructions: All comments will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider CBI or otherwise protected should be clearly identified as such and should not be submitted through [www.regulations.gov](http://www.regulations.gov) or e-mail. The [www.regulations.gov](http://www.regulations.gov) website is an "anonymous access" system, and EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send e-mail directly to EPA, your e-mail address will be automatically captured and included as part of the public comment. If EPA cannot read your comments due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment.

Docket: The index to the docket for this action is available electronically on the [www.regulations.gov](http://www.regulations.gov) website and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California, 94105. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available at either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section below.

Copies of the SIP materials are also available for inspection at the following locations:

- California Air Resources Board, 1001 I Street, Sacramento, California 95812, and
- South Coast Air Quality Management District, 21865 E.

Copley Drive, Diamond Bar, California 91765.

The SIP materials are also electronically available at:

[http://www.aqmd.gov/aqmp/Lead\\_SIP/homepage.htm](http://www.aqmd.gov/aqmp/Lead_SIP/homepage.htm) and  
<http://www.arb.ca.gov/planning/sip/sip.htm>.

**FOR FURTHER INFORMATION CONTACT:** Wienke Tax, Air Planning Office (AIR-2), U.S. Environmental Protection Agency, Region IX, (415) 947-4192, [tax.wienke@epa.gov](mailto:tax.wienke@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document, "we," "us" and "our" refer to EPA.

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#### I. The Lead NAAQS and the Los Angeles County Lead

#### Nonattainment Area

### **A. The Lead NAAQS**

Under the Clean Air Act (CAA), EPA must establish national ambient air quality standards (NAAQS) for six criteria pollutants, including lead. Lead is generally emitted in the form of particles, which end up being deposited in water, soil, and dust. People may be exposed to lead by inhaling it, or by ingesting lead-contaminated food, water, soil, or dust. Once in the body, lead is quickly absorbed into the bloodstream and can result in a broad range of adverse health effects. These include damage to the central nervous system, cardiovascular function, kidneys, immune system, and red blood cells. Children are particularly vulnerable to lead exposure, in part because they are more likely to ingest lead and in part because their still-developing bodies are more sensitive to the effects of lead. Urban children are also of particular risk if the mother is exposed to lead. The harmful effects to children's developing nervous systems (including their brains) arising from lead exposure may include IQ loss, poor academic achievement, long-term learning disabilities, and an increased risk of delinquent behavior.

EPA first established a lead standard in 1978 at 1.5 micrograms per meter cubed ( $\mu\text{g}/\text{m}^3$ ) as a quarterly average.<sup>1</sup> Based on new health and scientific data, EPA revised the federal lead

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<sup>1</sup> See 43 FR 46246, October 5, 1978.

standard to  $0.15 \mu\text{g}/\text{m}^3$  and revised the averaging time for the standard on October 15, 2008 (see 73 FR 66964, November 12, 2008). A violation of the standard occurs when ambient lead concentrations exceed  $0.15 \mu\text{g}/\text{m}^3$  averaged over a 3-month rolling period.

The process for designating areas following promulgation of a new or revised NAAQS is contained in section 107(d) of the CAA. The CAA requires EPA to complete the initial area designations process within two years of promulgating a new or revised NAAQS. Designations for the 2008 lead NAAQS were promulgated effective December 31, 2010 (see 75 FR 71033). Based on ambient air quality data for the years 2007-2009, a portion of Los Angeles County (excluding the high desert areas, San Clemente and Santa Catalina Islands) was identified as an area that did not meet the 2008 lead NAAQS.<sup>2</sup>

Areas are required to attain the revised lead standard as expeditiously as practicable, but no later than five years from the date the nonattainment designation became effective. For the Los Angeles County lead nonattainment area, this date is December 31, 2015.

Attainment demonstration state implementation plans (SIPs) are due 18 months after the effective date of an area's

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<sup>2</sup> For an exact description of the Los Angeles County lead nonattainment area, see 40 CFR 81.305.

designation. For the Los Angeles County lead nonattainment area, the SIP was due June 30, 2012. These SIPs should include emissions inventories, a reasonable further progress (RFP) demonstration, reasonably available control measures/reasonably available control technology (RACM/RACT) demonstration, an attainment demonstration, and contingency measures. To demonstrate attainment, control measures need to be in place by November 1, 2012.<sup>3</sup>

**A.    *The Lead Nonattainment Problem in Los Angeles County***

Stationary sources of lead are generally from large industrial sources, including metals processing, particularly primary and secondary lead smelters. Lead can also be emitted by iron and steel foundries; primary and secondary copper smelters; industrial, commercial and institutional boilers; waste incinerators; glass manufacturing; refineries; and cement manufacturing. The South Coast Air Quality Management District (SCAQMD or "District") has determined that the primary causes of the nonattainment status of Los Angeles County are two large lead-acid battery recycling facilities, Exide Technologies located in the city of Vernon, and Quemetco, Inc. located in the City of Industry. These facilities receive used lead-acid batteries and other lead-bearing materials and recycle them, recovering the lead. Lead is recycled because of its value and

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<sup>3</sup> See 73 FR 66964 (November 12, 2008).



to reduce toxic waste, and it is primarily used to manufacture new batteries.

Because regional ambient air lead concentrations indicate low ambient lead levels relative to the new lead NAAQS, and the only ambient levels exceeding the NAAQS were at sites near the lead-acid battery recyclers, SCAQMD's lead attainment strategy is focused on reducing directly-emitted lead from these two sources.

## **II. California's State Implementation Plan Submittal to Address Lead Nonattainment in the Los Angeles Nonattainment Area**

### **A. California's SIP Submittal**

Designation of an area as nonattainment starts the process for a state to develop and submit to EPA a SIP under title 1, part D of the CAA. This SIP must include, among other things, a demonstration of how the NAAQS will be attained in the nonattainment area as expeditiously as practicable, but no later than the date required by the CAA. Under CAA section 191(a), a State has up to 18 months after an area's designation to nonattainment to submit its SIP to EPA. For the 2008 lead NAAQS, these nonattainment SIPs were due no later than June 30, 2012.

The SCAQMD is the air quality agency that develops SIPs for the Los Angeles area. The *Final 2012 Lead State Implementation Plan - Los Angeles County* (2012 Los Angeles County Lead SIP) was

adopted by the SCAQMD Governing Board on May 4, 2012.<sup>4</sup> The California Air Resources Board (CARB) adopted the SIP on May 24, 2012 and submitted it to EPA on June 20, 2012.<sup>5</sup>

***B. CAA Procedural and Administrative Requirements for SIP***

***Submittals***

CAA sections 110(a)(1) and (2) and 110(l) require a state to provide reasonable public notice and opportunity for public hearing prior to the adoption and submittal of a SIP or SIP revision. To meet this requirement, every SIP submittal should include evidence that adequate public notice was given and a public hearing was held consistent with EPA's implementing regulations in 40 CFR section 51.102.

Both the District and CARB have satisfied applicable statutory and regulatory requirements for reasonable public notice and hearing prior to adoption and submittal of the 2012 Los Angeles County Lead SIP. The District provided a public comment period and held a public hearing prior to the adoption of the 2012 Los Angeles County Lead SIP on May 4, 2012. CARB provided the required public notice and opportunity for public comment prior to its May 24, 2012 public hearing on the plan.

The SIP submittal includes notices of the District and CARB public hearings, as evidence that all hearings were

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<sup>4</sup> See SCAQMD Governing Board Resolution No. 12-11.

<sup>5</sup> See CARB Board Resolution No. 12-20.

properly noticed.<sup>6</sup> We therefore find that the submittals meet the procedural requirements of CAA sections 110(a) and 110(l).

CAA section 110(k)(1)(B) requires EPA to determine whether a SIP submittal is complete within 60 days of receipt. This section also provides that any plan that EPA has not affirmatively determined to be complete or incomplete will become complete 6 months after the date of submittal by operation of law. EPA's SIP completeness criteria are found in 40 CFR part 51, Appendix V. The 2012 Los Angeles County Lead SIP became complete by operation of law on December 20, 2012.

### **III. CAA and Regulatory Requirements for Lead Attainment SIPs**

#### **A. CAA and EPA Guidance**

EPA is implementing the lead NAAQS under Title 1, Part D, subparts 1 and 5 of the CAA, which includes section 172, "Nonattainment plan provisions," and sections 191 and 192, "Plan Submission Deadlines" and "Attainment Dates," respectively.

Section 192(a) establishes the attainment date for lead nonattainment areas "as expeditiously as practicable" but no later than five years from the date of the nonattainment designation for the area. EPA designated most of Los Angeles County (except for the high desert areas and San Clemente and

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<sup>6</sup> See Enclosure 3, California Air Resources Board, "Notice of Public Meeting to Consider Approval of the Proposed State Implementation Plan Revision for the Federal Lead Standard," and Enclosure 6, Notice of Public Hearing, Adoption of 2012 Lead State Implementation Plan - Los Angeles County for the South Coast Air Quality Management District in the 2012 Los Angeles County Lead SIP.

Catalina Islands) as a nonattainment area effective December 31, 2010, and thus the applicable attainment date is no later than December 31, 2015. Under section 172(a)(2)(D), the Administrator is precluded from granting an extension of this attainment date where the statute separately establishes a specific attainment date, such as the 5-year deadline established in section 192(a).

Section 172(c) contains the general statutory planning requirements applicable to all nonattainment areas, including the requirements for emissions inventories, RACM/RACT, attainment demonstrations, RFP demonstrations, and contingency measures.

When EPA issued the NAAQS for lead on November 12, 2008 ("lead NAAQS rule"), it included some implementation guidelines for the lead NAAQS regarding planning requirements. See 73 FR 66964. EPA also issued several guidance documents related to planning requirements for the lead NAAQS. These include:

- Memorandum from Scott Mathias, Interim Director, Air Quality Policy Division, USEPA Office of Air Quality Planning and Standards, to Regional Air Division Directors, Regions I-X, "2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS) Implementation Questions and Answers," July 8, 2011, ("Lead Q&A") and

- "Addendum to the 2008 Lead NAAQS Implementation Questions and Answers Signed on July 11, 2011, by Scott Mathias," dated August 10, 2012. ("Lead Q&A Addendum"); and
- *Implementation of the 2008 Lead National Ambient Air Quality Standards - Guide to Developing Reasonably Available Control Measures (RACM) for Controlling Lead Emissions*, USEPA Office of Air Quality Planning and Standards, EPA-457/R-12-001, March 2012 ("Lead RACM Guidance").<sup>7</sup>

The lead NAAQS rule and its preamble and the two guidance documents address the statutory planning requirements for emissions inventories, RACM/RACT, attainment demonstrations including air quality modeling requirements, RFP demonstrations, and contingency measures. The lead NAAQS rule also addresses other matters such as monitoring, designations, lead infrastructure SIPs and exceptional events.

Control measures for the 2008 lead NAAQS need to be in place as expeditiously as practicable. In order for control measures to result in three years of monitored clean data by the attainment date, lead nonattainment areas required to

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<sup>7</sup> All three of these guidance documents can be found in the docket for today's action.

demonstrate attainment by December 31, 2015 would need to have all necessary controls in place no later than November 1, 2012.<sup>8</sup>

We will discuss each of the CAA and regulatory requirements for lead attainment plans in more detail below in our review of the 2012 Los Angeles County Lead SIP.

#### ***B. Infrastructure SIPs for Lead***

Under section 110 of the CAA, all states (including those without nonattainment areas) are required to submit infrastructure SIPs within three years of the promulgation of a new or revised NAAQS. Because the lead NAAQS was signed and widely disseminated on October 15, 2008, the infrastructure SIPs were due by October 15, 2011. Section 110(a)(1) and (2) require states to address basic program elements, including requirements for emissions inventories, monitoring, and modeling, among other things. Subsections (A) through (M) of section 110(a)(2) set forth the elements that a states program must contain in the SIP. California's lead infrastructure SIP was submitted on October 6, 2011 and will be acted on in a separate rulemaking action.

### **IV. Review of the 2012 Los Angeles County Lead SIP**

#### ***A. Summary of EPA's Proposed Actions***

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<sup>8</sup> Lead Q&A, p. 4.

EPA is proposing to approve the 2012 Los Angeles County Lead SIP demonstrating attainment of the 2008 lead NAAQS in the Los Angeles County lead nonattainment area. We are proposing to approve the base year emissions inventory in this SIP revision as meeting the applicable requirements of the CAA and EPA guidance. We are also proposing to approve the attainment demonstration, RACM/RACT analysis, RFP demonstration, and the contingency measures as meeting the applicable requirements of the CAA and EPA guidance.

EPA's analysis and findings are discussed below for each applicable requirement. The Technical Support Document (TSD) for today's proposed action contains additional details on selected lead planning requirements. We also discuss the SCAQMD lead monitoring network and present recent ambient air quality monitoring data in the TSD.

## ***B. Emission Inventories***

### **1. Requirements for Emission Inventories**

CAA section 172(c)(3) requires that states submit a "comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant." Therefore, all sources of lead emissions in the nonattainment area must be included in the submitted inventory. A base year emission inventory is required for the attainment demonstration and for meeting RFP requirements. The base year emissions inventory for

2010 or other suitable year should be used for attainment planning and RFP plans for areas initially designated nonattainment for the lead NAAQS in 2010.<sup>9</sup>

In addition to inventory reporting requirements in CAA section 172(c)(3), 40 CFR 51.117(e)(1) requires that the inventory contain all point sources that emit 0.5 tons of lead emissions per year (tpy).<sup>10</sup> Based on annual emissions reporting for 2010, no point sources in the Los Angeles County lead nonattainment area emit over 0.5 tpy of lead.

## **2. Base Year Emissions Inventory in the 2012 Los Angeles County Lead SIP**

The 2010 base year inventory for the Los Angeles County lead nonattainment area and additional documentation for the inventory are described in Chapter 3 of the 2012 Los Angeles County Lead SIP. The 2010 base year lead inventory provides the basis for the control measure analysis and the RFP and attainment demonstrations in the 2012 Los Angeles County Lead SIP.

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<sup>9</sup>2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS) Implementation Questions and Answers, Memorandum from Scott Mathias, Interim Director, Air Quality Policy Division, Office of Air Quality Planning and Standards, USEPA to Air Quality Division Directors, Regions I-X. July 8, 2011. Also see, Addendum to the 2008 Lead NAAQS Implementation Questions and Answers Signed on July 11, 2011, by Scott Mathias. August 10, 2012.

<sup>10</sup> Additional emissions inventory reporting requirements are also found in EPA's Air Emissions Reporting Rule (AERR) (codified at 40 CFR part 51 subpart A) and 73 FR 76539. Although the AERR requirements are separate from the SIP-related requirements in CAA section 172(c)(3) and 40 CFR 51.117(e)(1), the AERR requirements are intended to be compatible with the SIP-related requirements.



Lead emissions are grouped into two general categories, stationary sources and mobile sources. Stationary sources can be further divided into "point" and "area" sources. Point sources are typically emitted from permitted facilities and have one or more identified and fixed pieces of equipment and emissions points. Facilities are required to report their emissions to the SCAQMD Annual Emissions Reporting Program. Conversely, area sources consist of widespread and numerous smaller emission sources, such as small permitted facilities, households, and road dust. The mobile sources category can be divided into two major subcategories, "on-road" and "off-road" mobile sources. On-road mobile sources include light-duty automobiles, light-, medium-, and heavy-duty trucks, and motorcycles. Off-road mobile sources include aircraft, locomotives, construction equipment, mobile equipment, and recreational vehicles. The methodologies used to calculate the emission inventories are described in Chapter 3 of the 2012 Los Angeles County Lead SIP.

Table 1 depicts the 2010 lead emissions inventory for the Los Angeles County lead nonattainment area as presented in the 2012 Los Angeles County Lead SIP. Emissions in Table 1 are broken down by the major source categories described above. Table 2 provides a further break down of the 2010 inventory into specific subcategories. Table 1 indicates that 4.2 tons per year (tpy) of lead emissions are from mobile sources. This accounts

for 23 percent of the total lead inventory for Los Angeles County. Because lead is still used as an additive in general aviation fuel, aircraft powered by piston-driven engines comprise 4.0 tpy or 93 percent of the mobile source inventory.<sup>11</sup> Stationary and area sources emit 14.0 tpy or 77 percent of the lead inventory. Two area sources, construction and demolition and paved road dust, account for 12.6 tpy or approximately 90 percent of the total stationary and area source emissions.

**Table 1. Summary of Los Angeles County Nonattainment Area 2010 Emissions Inventory for Lead**

Source Category	Lead Emissions <sup>a</sup> (tpy)
	2010
Stationary and Area	14.0
On-road Mobile	0.2
Off-road Mobile	4.0
Total	18.2

<sup>a</sup> Source: Table 3-1, 2012 Los Angeles County Lead SIP

As indicated in Chapter 3, page 3-3 of the 2012 Los Angeles County Lead SIP, Los Angeles County's lead nonattainment status is linked to two large lead-acid battery-recycling facilities -- Exide Technologies in Vernon ("Exide") and Quemetco Inc. in City of Industry ("Quemetco"). These two sources fall within the

<sup>11</sup> For a complete list of airports located in the Los Angeles County lead nonattainment area and their lead emissions, see table 3-3 on page 3-11 of the South Coast Lead 2012 SIP or the Technical Support Document for this action. For more information on EPA efforts to monitor lead emissions at airports, see EPA Program Update "Airport Lead Monitoring," EPA-420-F-13-032, June 2013 found at <http://www.epa.gov/otaq/regs/nonroad/aviation/420f13032.pdf>.

*Metal Processes* subcategory shown in Table 2.<sup>12</sup> Even though the Metal Processes category accounts for a small percentage of total emissions in the nonattainment area, based on the historical lead measurements in Los Angeles County, the vicinities near the Exide and Quemetco facilities are areas where exceedances of the lead NAAQS have occurred in the past and could potentially reoccur.

**Table 2. Category-specific Los Angeles County Nonattainment Area 2010 Emissions Inventory for Lead**

Source Category	2010 Lead Emissions <sup>a</sup> (tpy)	
Stationary and Area Sources		
<i>Fuel Combustion</i>		
Electric Utilities	0.02	
Cogeneration	0.01	
Petroleum Refining (Combustion)	0.05	
Manufacturing and Industrial	0.08	
Service and Commercial	0.04	
<i>Waste Disposal</i>		
Incinerators	0.01	
<i>Petroleum Production &amp; Marketing</i>		
Petroleum Refining	0.03	
<i>Industrial Processes</i>		
Mineral Processes	0.06	
Metal Processes	0.42	

<sup>12</sup> Lead concentrations at all ambient monitoring network sites in the Los Angeles County portion of the Basin are well below the new 2008 standard for lead, with typical levels of about 0.01 µg/m<sup>3</sup>. The Los Angeles County lead nonattainment area's nonattainment status has not been linked to any stationary sources other than Exide and Quemetco; however, for additional information on point sources that emit greater than one pound of lead per year and are located in the nonattainment area, see Table 3-2 on page 3-9 of the 2012 Los Angeles County Lead SIP.

Glass and Related Products	0.02	
<i>Miscellaneous Processes</i>		
Residential Fuel Combustion	0.02	
Construction and Demolition	5.80	
Paved Road Dust	6.83	
Unpaved Road Dust	0.47	
Fugitive Windblown Dust	0.06	
Fires	0.01	
Waste Burning and Disposal	0.03	
Total Stationary and Area Sources		13.96
Mobile Sources		
<i>On-Road Vehicles</i>		
Light-Duty Passenger	0.09	
Light & Medium Duty Trucks	0.06	
Heavy-Duty Gas Trucks	0.0	
Heavy-Duty Diesel Trucks	0.07	
Total On-Road Vehicles		0.22
<i>Off-road Mobile</i>		
Aircraft	3.95	
Trains	0.01	
Ships & Commercial Boats	0.0	
Off-Road Equipment	0.06	
Total Off-Road Mobile		4.02
Total All Sources		18.20

<sup>a</sup> Source: 2012 Los Angeles County Lead SIP, Table 3-1.

### 3. Proposed Action on the Emission Inventory

We have reviewed the emissions inventories in the 2012 Los Angeles County Lead SIP and the inventory methodologies used by the District and CARB for consistency with CAA requirements, the lead NAAQS rule, and EPA's guidance. We find that the 2010 base

year inventory is a comprehensive, accurate, and current inventory of actual or projected emissions of lead in the Los Angeles County lead nonattainment area as of the date of the submittal. We therefore propose to approve the 2010 base year inventory as meeting the requirements of CAA section 172(c)(3) and applicable EPA guidance.

### ***C. RACM/RACT Demonstration and Adopted Control Strategy***

#### **1. Requirements for RACM/RACT Demonstrations**

CAA section 172(c)(1) requires that each attainment plan "provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology), and shall provide for attainment of the national primary ambient air quality standards." EPA defines RACM as measures that a state finds are both reasonably available and contribute to attainment as expeditiously as practicable in its nonattainment area. Lead nonattainment plans must contain RACM (including RACT) that address sources of ambient lead concentrations. The EPA's historic definition of RACT is the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and

economic feasibility.<sup>13</sup> EPA recommends that, at a minimum, all stationary sources emitting 0.5 tpy or more should undergo a RACT review. See 73 FR 67038. Based on annual emissions reporting for 2010, no point sources in the Los Angeles County lead nonattainment area emit over 0.5 tpy of lead.<sup>14</sup>

## **2. RACM/RACT Demonstration in the 2012 Los Angeles County Lead SIP**

CARB and the District have rulemaking processes for development, adoption and implementation of RACM/RACT that have been in place for decades.

Because of lead's dispersion characteristics (e.g., lack of transport over a large geographic area), the highest ambient concentrations of lead are expected to be near lead sources (e.g., Exide and Quemetco). The 2008 lead NAAQS is unique in that attainment must be demonstrated at source-oriented monitors as well as ambient monitors, and this RACM/RACT demonstration addresses specific facilities that may cause a NAAQS exceedance. The RACM/RACT demonstration for the 2012 Los Angeles County Lead SIP does not involve or require a typical RACM evaluation as is done for other criteria pollutants (e.g., ozone or fine particulate matter) which involves looking at a broader set of source categories.

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<sup>13</sup> See for example, 44 FR 53761 (September 17, 1979) and footnote 3 of that notice.

<sup>14</sup> Exide is the largest stationary source emitter of lead in Los Angeles County with 2010 emissions of 655.5 pounds or approximately 0.3 tpy.

Based on lead monitoring data, SCAQMD identified two large lead-acid battery recycling facilities (i.e., Exide and Quemetco) as the only sources of lead in the Los Angeles County lead nonattainment area that have caused or have the potential to cause exceedances of the 2008 lead NAAQS.<sup>15</sup> The overall control strategy in the 2012 Los Angeles County Lead SIP relies primarily on implementation of Rule 1420.1 - Emissions Standard for Lead from Large Lead-Acid Battery Recycling Facilities, adopted by SCAQMD in November 2010. Thus EPA's evaluation of RACM/RACT is based on an evaluation of Rule 1420.1. SCAQMD's RACM/RACT evaluation is found in Section 6, pages 17-21 of the 2012 Los Angeles County Lead SIP. A discussion of Rule 1420.1 is provided below.

#### *Control measure*

On January 25, 2013, EPA approved SCAQMD Rule 1420.1 into the California SIP. See 78 FR 5305. Rule 1420.1 establishes facility-wide and individual point source maximum allowable emission rates and requires secondary lead control devices on dryers. Fugitive lead emissions are addressed through housekeeping and maintenance activity requirements, and total enclosures, vented to control devices, for all areas where lead

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<sup>15</sup> As previously stated, EPA recommends that, at a minimum, all stationary sources emitting 0.5 tpy (1000 pounds) or more should undergo a RACT review (See 73 FR 66964, at 67038). Based on annual emissions reporting for 2010, no point sources in the Los Angeles Lead nonattainment area emit over 0.5 tpy of lead.

is being processed and where maintenance activities are occurring. The rule also sets ambient standards for airborne lead concentrations at monitors around the facility and requires facility-operated monitors (a minimum of four) that collect samples on a once every-three-days schedule. Source testing, recordkeeping, and reporting requirements are included to ensure continuous compliance. The rule also requires the submittal of a new compliance plan and emission reduction feasibility study when a source's monitoring indicates ambient levels have reached  $0.12 \mu\text{g}/\text{m}^3$ , which is 80% of the rule limit.

EPA describes RACM/RACT nationally for secondary lead smelters in guidance published in March 2012.<sup>16</sup> Rule 1420.1 includes extensive and comprehensive provisions for the control of lead point source and fugitive emissions and contains all the necessary RACM/RACT elements described in the EPA guidance. A summary of these minimum elements and how they are addressed in Rule 1420.1 is provided in EPA's TSD for this action and in the TSD for EPA's approval of Rule 1420.1.<sup>17</sup>

EPA also published the final residual risk and technology review revisions to the National Emission Standard for Hazardous Air Pollutants from Secondary Lead Smelting on January 5, 2012

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<sup>16</sup> Implementation of the 2008 Lead National Ambient Air Quality Standards, Guide to Developing Reasonably Available Control Measures (RACM) for Controlling Lead Emissions, EPA-457/R-12-001. March 2012.

<sup>17</sup> TSD for EPA's Proposed Rulemaking for the California SIP, SCAQMD Rule 1420.1, Emissions Standard for Lead from Large Lead-acid Battery Recycling Facilities. June 2012. The TSD is included in the docket for today's action.



(NESHAP from Secondary Lead Smelting). 77 FR 556. The revised NESHAP requirements represent maximum achievable control technology (MACT) under CAA section 112. MACT requirements apply nationwide, regardless of whether an area attains the lead NAAQS. EPA considered the MACT requirements as part of our evaluation of RACM/RACT. A summary of the MACT requirements and how they are addressed by Rule 1420.1 is also in the TSD for EPA's approval of Rule 1420.1, which can be found in the docket for today's proposed action.

In its January 25, 2013 approval of Rule 1420.1, EPA determined that, based on comparison of Rule 1420.1 to the national RACM guidance and MACT, and additional analysis provided in SCAQMD's staff report,<sup>18</sup> Rule 1420.1 adequately fulfills CAA RACM/RACT requirements.

The following provides a detailed description of Rule 1420.1 requirements.

- ***Ambient Air Lead Concentrations:*** Facilities are not allowed to discharge into the atmosphere emissions which contribute to ambient air concentrations of lead that exceed  $0.15 \mu\text{g}/\text{m}^3$  averaged over any 30 consecutive days. The averaging time is shorter than that of the lead NAAQS (rolling 3-month average of monthly averages) with a more frequent sampling requirement of

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<sup>18</sup> Staff Report, Proposed Rule 1420.1 - Emissions Standard for Lead from Large Lead-Acid Battery Recycling Facilities, November, 2010.

one sample in three days versus the NAAQS which requires one sample in six days. Ambient air samples are collected close to the facility's fenceline. Thus, potential rule violations in the form of exceedances of the ambient limits in Rule 1420.1 will likely occur before exceedances of the federal NAAQS and allow for corrective action to take place to avoid such federal NAAQS exceedances.

▪ ***Ambient Air Monitoring and Sampling Requirements:*** Each facility is required to collect and analyze ambient air lead samples to determine compliance with the ambient air quality lead concentration standard of Rule 1420.1. The rule requires a minimum of four monitors at facility locations approved by the District. Federal regulations require only one source-oriented monitor at all facilities emitting more than 0.5 tons of lead per year. Facilities are required to collect samples at least once every three days, more frequently than the federal requirement of once every six days.

Facilities that exceed an ambient air lead concentration of  $0.15 \mu\text{g}/\text{m}^3$  averaged over any 30 consecutive days, measured at any fence line monitor, will be in violation of the rule and be required to increase ambient air monitoring and sampling to a daily frequency. Daily monitoring and sampling will be required to be conducted for a period of at least 60 consecutive days at each sampling site that measured an exceedance until no 30-day

average exceedances are recorded. Sampling sites at the property line may be located just inside the fence line on facility property if logistical constraints preclude placement outside the fence line. As a result, monitors required under Rule 1420.1 will be located closer to fugitive lead sources, in most cases, when compared to monitors required by federal monitoring requirements, which must be in publicly accessible areas. Along with the shorter averaging time described previously, all of the ambient air monitoring and sampling requirements of Rule 1420.1 are more stringent than the federal requirements, such that potential rule violations will likely occur before exceedances of the lead NAAQS.

- **Total Enclosures:** All areas used in the lead-acid battery recycling operation for processing or storage of lead-containing material, and all areas where maintenance is being performed, are required to install total enclosures vented to a lead control device. This requirement provides maximum containment and will minimize fugitive lead-dust emissions generated in areas where processing, handling and storage of lead-containing materials occur. Rule 1420.1 also establishes requirements for monitoring and maintaining negative pressure and in-draft velocity at the openings of these enclosed areas.

- **Lead Point Source Emission Controls:** All lead emissions from lead point sources are required to be vented to an

emissions collection system that transports the entire gas stream to a lead control device. The total facility mass lead emission rate for all lead point sources shall not exceed 0.045 pounds of lead per hour (lbs/hr), with a maximum emission rate for any single lead point source not to exceed 0.010 lbs/hr. The maximum emission rates of 0.045 and 0.010 lb/hr were established to adequately provide a protective limit for exposure to lead emissions and achieve the ambient federal standard of  $0.15 \mu\text{g}/\text{m}^3$ .

- ***Housekeeping Requirements:*** The housekeeping requirements in Rule 1420.1 include: prescribed requirements for cleaning frequencies of specific areas; maintenance activity; encapsulation of all facility grounds; removal of weather caps on any lead emissions source stacks; building structural integrity inspections; storage and transport of lead-containing materials; onsite mobile vacuum sweeping; and surface impoundment pond or reservoir cleanings.

- ***Annual Source Testing:*** Annual source tests are required for all lead control devices to demonstrate compliance with the facility total lead mass emission rate standard of 0.045 lb/hr, and the maximum individual stack lead emission rate standard of 0.010 lb/hr. If the most recent source test for a lead point source demonstrates emissions of 0.0025 lb/hr or less, the facility may alternatively elect to conduct the next source test for that device within 24 months.

- ***Recordkeeping and Reporting Requirements:*** Requires recordkeeping and reporting, including public notifications, for specific maintenance activity, turnarounds and shutdowns for all lead-containing materials processed at the facility. Records for all housekeeping, maintenance activity, ambient air lead monitoring, lead control device inspection and maintenance, and unplanned shutdowns of any smelting furnaces must be maintained. Facilities are required to submit reports for monthly ambient air monitoring results for lead and wind data measured at each sampling location on a monthly basis. The rule also requires notifications of planned and unplanned shutdowns, and turnarounds.
- ***Compliance Plan:*** As an additional safeguard against the facilities exceeding the lead NAAQS or Rule 1420.1 limits, the requirement to prepare and submit a compliance plan is triggered if the facility exceeds  $0.12 \mu\text{g}/\text{m}^3$  as measured on a 30-day rolling average. The compliance plan must be implemented if the facility's lead emissions contribute to an exceedance of the Rule 1420.1 ambient lead standard of  $0.15 \mu\text{g}/\text{m}^3$  as measured on a 30-day rolling average. The compliance plan provision is intended to ensure that measures can be identified prior to exceedances of the  $0.15 \mu\text{g}/\text{m}^3$  NAAQS (which is measured on a 90-day rolling average) and are ready for fast implementation if the  $0.15 \mu\text{g}/\text{m}^3$  standard NAAQS is exceeded.

- On January 27, 2012, SCAQMD approved a Compliance Plan for Exide. The approved Compliance Plan requires Exide to implement various measures and install various controls to reduce lead emissions. Condition 8 of the Compliance Plan states that if, after March 31, 2012, monitored ambient lead concentrations exceed  $0.15 \mu\text{g}/\text{m}^3$ , Exide must submit to SCAQMD for approval, within 15 days of any such occurrence, the mitigation measures it will implement. Such mitigation measures include installation of second stage high efficient particulate air (HEPA) filters at specified locations.
- We discuss below how Rule 1420.1's compliance plan provisions meet EPA criteria for contingency measures.

***Expeditious Implementation of RACM/RACT.*** We find that expeditious implementation of RACM/RACT at affected sources within the nonattainment area is an appropriate approach to assure attainment of the lead NAAQS in an expeditious manner.<sup>19</sup> Rule 1420.1 establishes various deadlines for affected sources. Specifically, Rule 1420.1 requires affected sources to: (1) submit a complete permit application for all construction and necessary equipment within 30 days of November 5, 2010; (2) complete all construction within 180 days of receiving permit to construct approvals from the District, or by July 1, 2011, whichever was earlier; and (3) install, maintain, and operate total enclosures and lead point source emission control devices) by July 1, 2011. In addition, Rule 1420.1 requires expeditious

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<sup>19</sup> See Lead NAAQS Rule, 73 FR 66964 (November 12, 2008) at 67038-67039.

installation of additional controls in the event monitored ambient lead concentrations exceed  $0.15 \mu\text{g}/\text{m}^3$  on a rolling 30 day average. EPA believes the measures and schedule in Rule 1420.1 are both reasonably available and provide for attainment as expeditiously as practicable in the Los Angeles County lead nonattainment area.

#### *Adopted Control Strategies*

As described above, the primary control strategy in the 2012 Los Angeles County Lead SIP relies on emission reductions achieved through the implementation of SCAQMD Rule 1420.1 - Emissions Standard for Lead from Large Lead-Acid Battery Recycling Facilities. Full implementation of Rule 1420.1 began on January 1, 2012, and EPA approved the rule into the SIP on January 25, 2013. See 78 FR 5305.

### **3. Proposed Actions on RACM/RACT Demonstration and Adopted Control Strategy**

We propose to find that there are, at this time, no additional RACM that individually or collectively would advance attainment of the lead NAAQS by one year or more in the Los Angeles County lead nonattainment area. We also propose to find that the RACM/RACT measure is both reasonably available and provides for attainment as expeditiously as practicable in the Los Angeles County lead nonattainment area. This proposal is based on our review of the 2012 Los Angeles County Lead SIP, the

sources contributing to nonattainment of the lead NAAQS, the District's adopted control strategy and EPA guidance. Therefore, we propose to find that the 2012 Los Angeles County Lead SIP provides for the implementation of RACM/RACT as required by CAA section 172(c)(1).

#### ***D. Attainment Demonstration***

##### **1. Requirements for Attainment Demonstrations**

CAA section 172 requires a state to submit a plan for each of its nonattainment areas that demonstrates attainment of the applicable ambient air quality standard as expeditiously as practicable but no later than the specified attainment date. This demonstration should consist of four parts:

(1) technical analyses that locate, identify, and quantify sources of emissions that are contributing to violations of the lead NAAQS;

(2) analyses of future year emissions reductions and air quality improvement resulting from already-adopted national, state, and local programs and from potential new state and local measures to meet the RACT, RACM, and RFP requirements in the area;

(3) adopted emissions reduction measures with schedules for implementation; and

(4) contingency measures required under section 172(c)(9) of the CAA.



The requirements for the first two parts are described in the sections on emissions inventories and RACM/RACT above and in the sections on air quality modeling and the attainment demonstration that follows immediately below. Requirements for the third and fourth parts are described in the sections on the control strategy and the contingency measures, respectively.

## **2. Air Quality Modeling in the 2012 Los Angeles County Lead SIP**

The lead attainment demonstration must include air quality dispersion modeling developed in accordance with EPA's Modeling Guidance.<sup>20</sup> The SCAQMD modeling analysis was prepared using EPA's preferred dispersion modeling system, the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) consisting of the AERMOD (version 12060) model and two data input preprocessors AERMET (version 11059) and AERMAP (version 11103). AERSURFACE (version 08009) was also used to develop inputs to AERMET. The Building Profile Input Program for Plume Rise Model Enhancements was also used in the downwash-modeling and incorporated good engineering practice. More detailed information on the AERMOD modeling system and other modeling tools and documents can be found on the EPA Technology Transfer Network Support Center for Regulatory Atmospheric Modeling (SCRAM)<sup>21</sup> and in the 2012 Los

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<sup>20</sup> 40 CFR Part 51 Appendix W (EPA's *Guideline on Air Quality Models*) (November 2005) located at [http://www.epa.gov/ttn/scram/guidance/guide/appw\\_05.pdf](http://www.epa.gov/ttn/scram/guidance/guide/appw_05.pdf)

<sup>21</sup> <http://www.epa.gov/ttn/scram/>

Angeles County Lead SIP in the docket for today's proposed action.

*a. Modeling Approach*

The following is an overview of the lead modeling approach used in 2012 Los Angeles County Lead SIP. This approach was developed by the SCAQMD and revised based on comments received from the EPA.

Model inputs were developed using the AERMOD modeling system. AERMET was used to develop the necessary 5-year meteorological data set for each facility using the meteorological data from the most representative monitoring station. For the Exide facility modeling application, the SCAQMD Central LA monitoring station was determined to be the most representative meteorological site. SCAQMD's rationale for the use of these data is described in the TSD for today's action. Only four years of meteorological data were available for this station (2006 to 2009). The La Habra monitoring station was determined to be the most representative site for the Quemetco facility, and five years (2005 to 2009) of meteorological data were available. The National Weather Service San Diego Miramar Naval Air Station were determined to be the most representative upper air meteorological monitoring site for Exide and Quemetco.

A Cartesian receptor grid with 50-meter by 50-meter spacing was used at each facility, in addition to fence-line receptors

placed at 25-meter intervals. Receptor elevations and hill heights were assigned using AERMAP and terrain data, available from the United States Geological Survey. AERMOD output was processed through EPA's LEADPOST post processor (version 12114) deriving the maximum 3-month average rolling design value across the 5-year meteorological data period for Quemetco, and the 4-year period for Exide.

*b. Modeling Results*

Rule 1420.1 requirements were modeled to provide the assurance that emissions will not cause a NAAQS violation in 2015. The modeling results for total emissions (stack and fugitive emissions) are provided in the SIP for each facility, and are discussed below. The lead NAAQS compliance results of the attainment modeling are summarized below in Table 3, 2008 Lead NAAQS Attainment Demonstration Modeling Results for Exide and Quemetco Lead-Acid Battery Acid Recycling Facilities.

Stack Emissions

The Rule 1420.1 emission stack limits for 2015 were modeled for Exide and Quemetco. For each facility, the 0.045 lb/hr total stack emissions were evenly distributed throughout the stacks, and emissions from any individual stack were kept below the 0.010 lb/hr per stack limit. The modeled maximum 3-month rolling average lead concentration from stack emissions alone for Exide is 0.115  $\mu\text{g}/\text{m}^3$ . For Quemetco, the modeled maximum 3-month rolling

average lead concentration from stack emissions is  $0.083 \mu\text{g}/\text{m}^3$ . The 2015 modeled lead concentrations for the Quemetco facility are a conservative estimate of the impact because the modeling assumes the allowable stack emission limits set by Rule 1420.1, which are significantly higher than Quemetco's current stack emissions. No significant increases in actual emissions are expected beyond the modest growth factors used in the emission projection.

#### Fugitive Emissions

According to Chapter 6 of the 2012 Los Angeles County Lead SIP, Exide identified fugitive lead emissions as resulting from its raw materials processing system (RMPS) and from roadways. Quemetco did not identify fugitive lead emission to SCAQMD, so SCAQMD assumed fugitive emissions from Quemetco's battery wrecking area (which SCAQMD assumed to be approximately equivalent to Exide's RMPS) and from roadways. For 2015, for both Exide and Quemetco, SCAQMD relied on Rule 1420.1 emission standards (in particular, a requirement to use an onsite mobile vacuum sweeper or equivalent), and applied an 80% reduction to the roadway fugitive emissions (based on an assumed efficiency of 80% or greater for certified street sweepers). SCAQMD assumed that fugitive emissions for Exide's RMPS and Quemetco's battery wrecker area would not change between the current year and 2015

and therefore applied the same emissions values to the current year and year 2015 for these areas.

The modeling takes a number of relevant factors into consideration, including emissions, receptor proximity, and wind direction. The modeled maximum 3-month rolling average lead concentration from all emissions (stack and fugitive emissions combined) is 0.135  $\mu\text{g}/\text{m}^3$  for the Exide facility, and 0.140  $\mu\text{g}/\text{m}^3$  for Quemetco.

### **3. Attainment Demonstration**

The AERMOD modeling results are presented in Table 3 below. A background ambient air quality concentration of 0.01  $\mu\text{g}/\text{m}^3$ , based on air quality monitoring data from the South Coast AQMD network,<sup>22</sup> is included in the modeling results. The maximum modeled 3-month rolling average, including background data, for each of the facilities is less than or equal to the 2008 Lead NAAQS of 0.15  $\mu\text{g}/\text{m}^3$ . Based on these modeled attainment demonstration results, the SCAQMD concludes that the proposed controls should be sufficient to attain the 2008 lead NAAQS. A more detailed discussion of the modeling is included in the TSD for today's action and in Chapter 5 of the 2012 Los Angeles County Lead SIP.

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<sup>22</sup> SCAQMD's monitoring network lead design values for 2012, based on data from 2010, 2011 and 2012.

**Table 3. 2008 Lead NAAQS Attainment Demonstration Modeling Results for Exide and Quemetco Lead-Acid Battery Acid Recycling Facilities<sup>23</sup>**

Facility	Lead Concentration (Maximum 3-month Rolling Average) <sup>24</sup> , Stack and Fugitive Emission
Exide	0.135 µg/m <sup>3</sup>
Quemetco	0.140 µg/m <sup>3</sup>

#### **4. Proposed Action on Attainment Demonstration**

EPA has reviewed the modeling that SCAQMD submitted to support the attainment demonstration for 2012 Los Angeles County Lead SIP and has preliminarily determined that this modeling is consistent with CAA requirements, Appendix W, and EPA guidance for lead attainment demonstration modeling. We therefore propose to approve the modeling and attainment demonstration in the 2012 Los Angeles County Lead SIP.

#### ***E. RFP Demonstration***

##### **1. Requirements for RFP**

CAA section 172(c)(2) requires that attainment plans shall provide for RFP. RFP is defined in section 171(1) as "such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be

<sup>23</sup> Final results listed in Table 3 are rounded according to 40 CFR part 50, Appendix R; specifically subsection 4(a) which addresses comparison with the Lead NAAQS, as well as 5(a), (b), and (c) which addresses rounding conventions.

<sup>24</sup> The maximum modeled 3-month rolling average across all years of meteorological data (Exide 2006-2009, and Quemetco 2005-2009).

required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date." While for some pollutants, historically, RFP has been met through generally linear incremental progress toward attainment by the applicable attainment date, EPA believes that RFP for lead nonattainment areas should be met by "adherence to an ambitious compliance schedule" which is expected to periodically yield significant emission reductions, and as appropriate, linear progress.<sup>25</sup>

EPA recommends that SIPs for lead nonattainment areas provide a detailed schedule for compliance of RACM (including RACT) in the affected areas and accurately indicate the corresponding annual emission reductions to be achieved.<sup>26</sup> EPA expects that a detailed schedule would provide for periodic yields in significant emissions reductions.<sup>27</sup> In reviewing the SIP, EPA believes that it is appropriate to expect early implementation of less technology-intensive control measures (e.g., controlling fugitive dust emissions at the stationary source, as well as required controls on area sources) while phasing in the more technology-intensive control measures, such as those involving the purchase and installation of new hardware. We believe the expeditious implementation of RACM/RACT

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<sup>25</sup> 73 FR 66964, at p. 67038.

<sup>26</sup> Lead Q&A, p. 2.

<sup>27</sup> *Ibid.*

at affected sources within the nonattainment area is an appropriate approach to assure attainment of the lead NAAQS in an expeditious manner.<sup>28</sup>

## **2. RFP Demonstration in the 2012 Los Angeles County Lead SIP**

The RFP demonstration is contained in Chapter 6 of the 2012 Los Angeles County Lead SIP. The demonstration uses the 2010 actual emissions inventory as the base year inventory and 2012-2015 projected emissions based on Rule 1420.1 allowable emissions limits. Below we summarize the RFP demonstration in the 2012 Los Angeles County Lead SIP for both the Exide and Quemetco facilities.<sup>29</sup>

To demonstrate the emissions reductions associated with adherence to an ambitious compliance schedule and expeditious implementation of control measures, SCAQMD has addressed this requirement through the schedules in Rule 1420.1. Rule 1420.1 contains compliance deadlines of July 1, 2011 for implementation of all requisite control measures and emissions limits, and January 1, 2012 for the ambient monitoring limit of 0.15  $\mu\text{g}/\text{m}^3$ . The emissions reductions associated with Rule 1420.1 are presented in Table 4 below. By the time the 2012 Los Angeles County Lead SIP was submitted to EPA in June of 2012, most compliance deadlines in South Coast Rule 1420.1 were already in

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<sup>28</sup> See 73 FR 66964 (November 12, 2008) at 67038-67039.

<sup>29</sup> See 2012 Los Angeles County Lead SIP, pages 6-14 to 6-17.



effect.

**Table 4. 2012 Los Angeles County Lead SIP RFP Demonstration  
(emissions in lb/yr)**

<b>Facility</b>	<b>2010 Emissions (actual emissions)</b>	<b>2012 Emissions (after implementation of South Coast Rule 1420.1)</b>	<b>2015 Emissions</b>
Exide	655.5	437.4 <sup>a</sup>	≤437.4
Quemetco	96.2	98.1 <sup>a,b</sup>	107.7 <sup>a,b</sup>

<sup>a</sup> Total emissions based on requirements in South Coast Rule 1420.1.

<sup>b</sup> 2010 emissions were grown based on the growth factor in the South Coast 2007 Air Quality Management Plan.

RFP for Exide is demonstrated through the achievement of a 30 percent emissions reduction (i.e., 655.5 tpy - 437.4 tpy = 218.1 lbs/yr) resulting from implementation of South Coast Rule 1420.1. Quemetco's actual emissions in 2010 were 96.21 lbs/year, well below the 422.3 lbs/yr allowed based on requirements in Rule 1420.1.<sup>30</sup> With continued implementation of Quemetco's control measures, emissions are expected to stay well below 422.3 lbs/yr, as indicated in Table 4.

Rule 1420.1 was determined to meet RACM (see 78 FR 5305,

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<sup>30</sup> Between 2006 and 2008, Quemetco significantly reduced actual emissions at their facility. In response to requirements under California Assembly Bill 2588 (The Air Toxics "Hot Spots" Information and Assessment Act), Quemetco submitted a Health Risk Assessment (HRA) to SCAQMD in December 2005. To reduce toxic emissions of metals (including lead) and particles identified in the HRA, Quemetco installed a wet electrostatic precipitator (WESP) that became fully operational and approved by SCAQMD in October 2008. The WESP, combined with other facility changes, significantly reduced lead emissions compared to prior years (e.g., 643 lbs reported by Quemetco for 2006).

January 25, 2013 and that determination is affirmed in today's action), and the emissions reductions resulting from implementation of Rule 1420.1 serve to meet the RFP requirements of the lead NAAQS.

### **3. Proposed Action on the RFP Demonstration**

We propose to find that the State has demonstrated that the 2012 Los Angeles County Lead SIP meets the requirements of section 172(c)(2) and relevant EPA guidance for meeting RFP.

### ***F. Contingency Measures***

#### **1. Requirements for Contingency Measures**

Under CAA section 172(c)(9), all lead attainment plans must include contingency measures to be implemented if an area fails to meet RFP ("RFP contingency measures") and contingency measures to be implemented if an area fails to attain the lead NAAQS by the applicable attainment date ("attainment contingency measures"). These contingency measures must be fully adopted rules or control measures that are ready to be implemented quickly without significant additional action by the State or EPA if the area fails to meet RFP requirements or fails to meet its attainment date. They must also be measures not relied on to demonstrate RFP or attainment in the plan and should provide SIP-creditable emissions reductions generally equivalent to about one year's worth of RFP. Finally, the SIP should contain a

trigger mechanism for the contingency measures and specify a schedule for their implementation. See CAA section 172(c)(9).

Contingency measures can include federal measures and local measures already scheduled for implementation that provide emissions reductions in excess of those needed to provide for RFP or expeditious attainment. EPA has approved numerous SIPs under this interpretation. See, e.g., 62 FR 15844, April 3, 1997; 62 FR 66279, December 18, 1997; 66 FR 30811, June 8, 2001; 66 FR 586 and 66 FR 634, January 3, 2001. EPA recognizes that certain actions, such as the notification of sources, modification of permits, etc., may be needed before a measure could be implemented. However, states must show that their contingency measures can be implemented with only minimal further action on their part and with no additional rulemaking actions such as public hearings or legislative review.

After EPA determines that a lead nonattainment area has failed to maintain RFP or timely attain the lead NAAQS, EPA generally expects all actions needed to affect full implementation of the contingency measures to occur within 60 days after EPA notifies the state of such failure.<sup>31</sup> The state should ensure that the measures are fully implemented as expeditiously as practicable after the requirement takes effect.

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<sup>31</sup> 73 FR 66964, at p. 67039.

If a State chooses to implement contingency measures earlier than would be triggered by a failure to demonstrate RFP or to attain, EPA does not believe the State needs to adopt additional contingency measures as a backfill for the early activation of those contingency measures.<sup>32</sup> However, if the area fails to demonstrate RFP or to attain, then the State will need to adopt additional contingency measures.<sup>33</sup>

## **2. Contingency Measures in the 2012 Los Angeles County Lead SIP**

The attainment plan for the Los Angeles County lead nonattainment area includes contingency measures to be implemented if the area fails to meet RFP requirements or to attain by its attainment date. The contingency measures for the Los Angeles County lead nonattainment area can be found in Chapter 6 of the 2012 Los Angeles County Lead SIP.<sup>34</sup> They are described below.

SCAQMD included facility-specific contingency measures for Exide and Quemetco in the 2012 Los Angeles County Lead SIP.<sup>35</sup> This is appropriate, given that these sources have historically been the major cause of NAAQS violations in the Los Angeles County lead nonattainment area.

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<sup>32</sup> See Memorandum, G.T. Helms, EPA Office of Air Quality Planning and Standards, USEPA, to Air Branch Chiefs, EPA Regions I-X, "Early Implementation of Contingency Measures for Ozone and Carbon Monoxide (CO) Nonattainment Areas," dated August 13, 1993. [http://www.epa.gov/ttn/oarpg/t1/memoranda/19930813\\_helms\\_contingency\\_measures\\_early\\_implementation.pdf](http://www.epa.gov/ttn/oarpg/t1/memoranda/19930813_helms_contingency_measures_early_implementation.pdf) and EPA's Lead Q&A.

<sup>33</sup> *Ibid.*

<sup>34</sup> See 2012 Los Angeles County Lead SIP, pp. 6-3 to 6-14.

<sup>35</sup> See 2012 Los Angeles County Lead SIP, Chapter 6, pages 6-10 through 6-13.

*Exide*

For the Exide facility, SCAQMD has submitted conditions 8A and 8B of the Exide compliance plan that was submitted to SCAQMD on December 20, 2011, and approved by SCAQMD on January 27, 2012 to EPA for inclusion in the SIP.<sup>36</sup> These measures state that as of March 31, 2012, if monitored ambient lead concentrations exceed  $0.15 \mu\text{g}/\text{m}^3$  on a rolling 30-day average at any SCAQMD or SCAQMD-approved ambient monitor, Exide shall implement, individually or in combination, mitigation measures to address the specific problem causing the ambient value to exceed  $0.15 \mu\text{g}/\text{m}^3$  on a rolling 30-day average.

The specific mitigation measures are described below. The mitigation measures can be implemented individually or in combination based on the specific situation surrounding the exceedance of the trigger concentration.

Condition 8A: Install an additional room ventilation baghouse or dust collector, equipped with a second stage high efficiency particulate air (HEPA) filter, with sufficient blower capacity to move a minimum of 50,000 cubic feet per minute (CFM) of air from one or more of the following locations:

- a. The battery crusher room in the north end of the RMPS building.

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<sup>36</sup> See letter, Jay Chen, P.E., Senior Engineering Manager, Engineering and Compliance, SCAQMD, to Corey Vodvarka, Plant Manager, Exide Technologies, dated January 27, 2012 and Exide compliance plan dated December 15, 2011, as modified January 20, 2012 in the docket for today's action.

- b. The truck loading and unloading dock on the south end of the RMPS building.
- c. The furnace room in the smelter building.
- d. The cupola feed room in the south end of the smelter building.

As an alternative to adding additional ventilation with individual baghouses or dust collectors, Exide may install a single larger air pollution control system with at least 200,000 CFM of blower capacity to cover all four of these locations.

Condition 8B: Install second stage HEPA filters on one or more of the following air pollution control systems:

- a. The hard lead refinery baghouse (device C47).
- b. The soft lead refinery baghouse (device C46).
- c. The MAC baghouses venting the RMPS building (devices C156 and C157).
- d. The cupola furnace feed room baghouse (device C48).

According to the requirements of South Coast Rule 1420.1, Exide must submit these measures to SCAQMD for approval within 15 days of a triggering occurrence.<sup>37</sup>

These measures are in addition to the measures specified in South Coast Rule 1420.1. The trigger mechanism is an ambient lead concentration exceeding  $0.15 \mu\text{g}/\text{m}^3$  on a rolling 30-day average, which is more stringent than a NAAQS violation of 0.15

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<sup>37</sup> Chen, p. 3.

ug/m<sup>3</sup> on a rolling 3-month average.<sup>38</sup>

#### *Quemetco*

In accordance with the Helms memo on early implementation of contingency measures, Quemetco's contingency measure is a control measure that is not needed for RFP or attainment.<sup>39</sup> Quemetco has installed a wet electrostatic precipitator (WESP) device as a secondary control device for air contaminants such as lead present in the gas stream as condensable particulates. For Quemetco, the proper design and operation of the WESP serves as the contingency measure. The WESP has already been implemented, thus no trigger or implementation schedule is needed. The WESP goes beyond what is required under South Coast Rule 1420.1, and the reductions provided by the measure are not included in or needed for the RFP or attainment demonstrations.

### **3. Proposed Action on the Contingency Measures**

We propose to find that the State has demonstrated that the 2012 Los Angeles County Lead SIP meets the requirements of section 172(c)(9) and relevant EPA guidance for contingency measures that would be triggered for failure to make RFP and for failure to attain.

## **V. EPA's Proposed Action and Request for Public Comments**

### **A. EPA's Proposed Approvals**

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<sup>38</sup>For current information about recent controls that have been installed or will be installed at Exide see [www.aqmd.gov/prdas/AB2588/Exide/Exide.html](http://www.aqmd.gov/prdas/AB2588/Exide/Exide.html)

<sup>39</sup> See footnote 21.

For the reasons discussed above, EPA is proposing to approve California's attainment SIP for the Los Angeles County lead nonattainment area for the 2008 lead NAAQS. This SIP submittal addresses CAA requirements and EPA regulations for expeditious attainment of the 2008 lead NAAQS for the Los Angeles County lead nonattainment area.

For the reasons discussed in this proposed rulemaking, EPA is proposing to approve under CAA section 110(k)(3) the following elements of the South Coast lead attainment SIP:

1. the SIP's base year emissions inventory as meeting the requirements of CAA section 172(c)(3) and 40 CFR 51.117(e)(1);

2. the attainment demonstration, including air quality modeling, that demonstrates attainment as expeditiously as practicable, as meeting the requirements of CAA section 172(c)(1);

3. the RACM/RACT demonstration, as meeting the requirements of CAA section 172(c)(1);

4. the RFP demonstration, as meeting the requirements of CAA section 172(c)(2);

5. and contingency measures as meeting the requirements of the CAA section 172(c)(9).

#### *B. Request for Public Comments*



We are taking public comments for thirty days following the publication of this proposed rule in the Federal Register. We will take all comments into consideration in our final rule.

## **VI. Statutory and Executive Order Reviews**

Under the CAA, the Administrator is required to approve a SIP submittal that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, October 7, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994). In addition, this proposed rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Lead, Reporting and recordkeeping requirements.

**AUTHORITY:** 42 U.S.C. 7401 et seq.

Dated: November 26, 2013

Jared Blumenfeld,  
Regional Administrator,  
EPA Region IX.

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